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OFFICE OF HAWAIIAN AFFAIRS
Legislative Testimony

HB2077 HD2 SD1
RELATING TO HYDROELECTRIC POWER
Senate Committee on Commerce, Consumer Protection, and Health

March 30, 2016 10:00 a.m. Room 229

The Office of Hawaiian Affairs (OHA) Administration will recommend a position of **COMMENT** to the Board of Trustees for HB2077 HD2 SD1, which would permit the development of hydroelectric facilities of up to 10 megawatts (MW) on agricultural lands, without ensuring that such facilities' use of current diversions comply with statutory mandates under the state water code and the public trust in water.

While previous versions of this measure required an updated instream flow standard (IFS) for any hydropower facility of greater than 500 kilowatts (KW), the latest draft would only require an updated standard when the facility involves "new or expanded diversions." Such an amendment fails to recognize that the vast majority of current stream diversions, many of which may divert a substantial amount of stream water, have never been subject to a meaningful IFS. **Accordingly, this draft may lead to the development of hydropower facilities that rely upon water diversions that violate the state water code and the constitutional public trust in water, resulting in substantial potential conflict and continuing harm to native flora and fauna, rural farming communities, and cultural practices.**

OHA appreciates the potential for hydropower generation to provide a relatively consistent source of renewable energy that, in some cases, may pose little risk of impacts to the environmental, agricultural, and economic interests of the state. OHA also recognizes that providing for hydroelectric facilities on agricultural lands is not inconsistent with the state's policy of allowing renewable energy generation in the agricultural district. However, OHA notes that hydropower generation of up to 10 MW – 20 times what is currently allowed – in the agricultural district may, in other cases, require the continued diversion and storage of surface water that would otherwise be essential for protected public trust purposes and beneficial instream uses.

Hawai'i's constitution and state water code together emphasize the need to ensure that uses of our state surface water resources prioritize public trust purposes and beneficial instream uses, including the protection of the stream and coastal environment, cultural practices, riparian agricultural activities, and instream hydropower generation, as well as the recharge of aquifers we depend upon for our drinking, agriculture, and other needs. Accordingly, the Commission on Water Resource Management (CWRM) is tasked with setting IFS that provide sufficient stream flow to meet these needs and purposes. **Unfortunately, CWRM has, for the most part, been unable to establish IFS for the vast majority of diverted streams in the state, simply setting "interim" IFS for diverted streams as the status quo of water flow in 1988 and 1989, irregardless of whether such stream flows**

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sufficiently supported reasonable beneficial instream uses as required by the water code.

This measure's express authorization of hydropower generation facilities raises concerns that it may, in some cases, encourage the ongoing use of water in direct conflict with the water code's prioritization of public trust purposes and reasonable beneficial instream uses. For example, agricultural landowners and stream diverters may seek to develop off-stream hydropower facilities through the maintenance of existing diversions and large-scale reservoirs, without any update to the IFS for diverted streams; such actions may in turn lead to the continued deprivation of water for environmental, cultural, agricultural, and aquifer recharge needs. If and when the Water Commission does seek to fulfill its duties in updating the IFS for such diverted streams, substantial and costly conflict may also arise between those who have invested substantially in a hydropower facility, and those who seek to uphold the state water code and our public trust in water.

Accordingly, should the Committee choose to move this measure forward, OHA highly recommends amending the language found on page 19, lines 7-15, to read as follows:

(C) [~~Are accessory to agricultural activities on agricultural land for agricultural use only; and~~] Shall, if over five hundred kilowatts in hydroelectric generating capacity, have the approval of the commission on water resource management, including a new instream flow standard established for the hydroelectric facility in question; and

Mahalo for the opportunity to testify on this measure.

Wai Maoli
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Testimony of the
Hawai'i Fresh Water Council
on
H.B. 2077, HD 2 SD 1
Relating to Hydroelectric Power
Senate Committee on Commerce, Consumer Protection, and Health
Wednesday, March 30, 2016. 10:00 A.M.
Conference Room 229

The Hawaii Fresh Water Council strongly supports H.B. 2077 HD2 SD1, which permits small hydroelectric power generation as a permitted use on agricultural land.

The Hawaii Fresh Water Initiative was launched in 2013 and assembled our diverse Fresh Water Council to develop a forward-thinking and consensus-based strategy to increase water security for Hawaii. Our Council jointly and unanimously recommended key strategies and policies with an ultimate goal of creating 100 million gallons per day (mgd) in additional, reliable fresh water capacity by 2030. One of the key strategies to achieve this statewide water goal is to increase recharge and water efficiency by maintaining reservoir storage capacity and upgrading agricultural water systems throughout the Islands.

H.B. 2077 HD2 SD1 would allow agricultural landowners to develop small hydroelectric power generation systems and pumped storage systems while developing revenue streams that can help maintain and upgrade agricultural water system infrastructure. The Council believes that upgraded infrastructure will also help conserve water lost through leaks.

For these reasons, we strongly support H.B. 2077 HD2 SD1, and urge passage.

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The Hawaii Community Foundation strongly supports H.B. 2077 HD 2 SD 1, which permits small hydroelectric power generation as a permitted use on agricultural land.

The Hawaii Community Foundation (HCF) became concerned about long-term fresh water security issues in 2012, as research emerged from the University of Hawaii linking climate change and negative trends in Hawaii's fresh water supply. HCF assembled a blue ribbon panel of water stakeholders to provide collaborative solutions, and in concert with their recommendations launched the Hawaii Fresh Water Initiative in 2013. The Fresh Water Initiative has a goal of creating 100 million gallons per day in additional, reliable fresh water capacity by 2030.

HCF supports the findings of the Fresh Water Council and strongly supports the policy recommendations found in their "Blueprint for Action." One of the key recommendations from the Council is increase recharge and water efficiency by maintaining reservoir storage capacity and upgrading agricultural water systems throughout the Islands. H.B. 2077 HD 2 SD 1 will help advance this important effort.

HCF strongly supports H.B. 2077 HD2 SD 1 and urges passage, and we stand ready to assist in helping implement this important program and all elements of the Council's "Blueprint for Action."

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Chair Baker

Committee on Commerce, Consumer Protection, and Health

HB2077 HD2 SD1

Wednesday, March 30, 2016

10AM, Conference Room 229 State Capitol

Aloha Chair Baker, Vice Chair Kidani, and Members of the Committee,

My name is Michelle Tsuchiya and I am currently a junior and AP Environmental Science student at Mililani High School doing a year long project on sustainability. I am in support of **HB2077 HD2 SD1 Relating to Hydroelectric Power.**

HB2077 HD2 SD1 proposes to permit the construction of small hydroelectric facilities in a manner that combines clean energy infrastructure and irrigation for agricultural land as defined by the United States Department of Energy.

Hawai'i spends a rough estimate of $5 billion every year to import oil to satisfy the state's increasing demands for energy, making Hawai'i the most oil dependent state in the nation. In 2015, the Hawai'i Legislature passed HB 623 which solidified Hawaii's commitment to clean energy by pledging to wholly transition to renewable energy sources for electricity, no later than the year of 2045. Hydroelectric facilities are feasible alternatives and this bill will ensure the maintenance of agricultural lands for the future generations to come.

Thank you for this opportunity to testify.

Sincerely,

Michelle Tsuchiya
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